

ART. X.—*Contributions to the Flora of Australia*, No. 36.*

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(With Plate V.)

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The first part of this paper gives further data in regard to *Eucalyptus Gilleni* Ewart and Kerr, a species collected in 1924 on Mt. Gillen in Central Australia when in fruit. As attempts to obtain the flower failed it was described in 1926 (*Proc. Roy. Soc. Vic.*, n.s., xxxix. (1), Contributions No. 32) from leaf and fruit, and as the latter contained fertile seed these were germinated and planted in the System Garden at the University. The plant grew into rather a handsome shrub 6 feet high, but did not flower until Autumn, 1929, developing ovate green buds with a conical inner and outer operculum, and pale fertile stamens, with small nearly globular anthers, with a gland on the back and opening by nearly parallel slits. The stamens were somewhat similar to those of *E. parvifolia* Cambage (*Maiden, Syst. Rev.*, iii., Pl. 104), but in all other respects the two plants differ widely. It shows some affinity to *E. cosmophylla* F.v.M., a South Australian species, in habit and general characters, but its domed fruit with projecting valves is quite dissimilar, and neither the inner nor outer operculum of *E. Gilleni* is acuminate, but rather bluntly conical. Nevertheless it may be related to *E. cosmophylla*.

The remainder of the paper consists of a preliminary list of plants collected in North West Australia during 1927, when visiting the Kimberley district to investigate the Walk-About Disease of Horses. It gives the localities and times of flowering of the plants collected. The collection was made in duplicate, one set being retained at Perth. All plants not identified in the field were examined and named by Mr. Gardner, Government Botanist at Perth, and the identifications checked later by comparison of the specimens with types in the Melbourne Herbarium.

List of Plants from the Kimberleys, North West Australia.

By

A. J. EWART and C. A. GARDNER.

ACANTHACEAE.

<i>Dicliptera glabra</i> Dene.	4 m. N.E. of Derby, N.W.A., Apr., 1927.
<i>Justicia procumbens</i> Linn.	Fitzroy Rd., 18 m. from Yecda, N.W.A., Apr., 1927.

*No. 35 in *Proc. Roy. Soc. Vic.*, n.s., xli. (1), 1928, p. 59.

AIZOACEAE (FICOIDEAE).

Trianthema oxycalyptera F.v.M. 6 m. E. of Derby, N.W.A., Apr., 1927. Gogo stn., Fitzroy R., N.W.A., May, 1927.
T. pilosa F.v.M. 6 m. E. of Derby, N.W.A., Apr., 1927.

AMARANTHACEAE.

Ptilotus corymbosus R. Br. 4 m. N.E. of Derby, N.W.A., Apr., 1927.
Gomphrena brachystylis F.v.M. Derby, N.W.A., Apr., 1927.
G. flaccida R. Br. 6 m. E. of Derby, N.W.A., Apr., 1927.
G. leptoclada Benth. Grant range, Liparinga, N.W.A., April, 1927.
G. tenella Benth. Shore Rd. to Leopold, 10 m. from Derby, N.W.A., Apr., 1927.
Amaranthus pallidiflorus F.v.M. Gogo stn., Fitzroy R., N.W.A., May, 1927.
Trichinium exaltatum Benth. Gogo stn., Fitzroy R., N.W.A., May, 1927.

BORAGINACEAE.

Heliotropium paniculatum R.Br. 4 m. N.E. of Derby, N.W.A., Apr., 1927.
H. tenuifolium R. Br. 6 m. E. of Derby, N.W.A., Apr., 1927.

CAPPARIDACEAE.

Cleome tetrandra Banks. 10 m. E. of Derby, Apr., 1927.
C. viscosa Linn. Derby, N.W.A., Apr., 1927.
 (*Polanisia viscosa*)

CARYOPHYLLACEAE.

Polycarpaea corymbosa Lam. Derby, N.W.A., Apr., 1927.
P. longiflora F.v.M. Derby, N.W.A., Apr., 1927.

COMBRETACEAE.

Terminalia Thozetii Benth. 4 m. N.E. of Derby, N.W.A., Apr., 1927.
T. volucris, R. Br. 6 m. E. of Derby, N.W.A., Apr., 1927.

COMMELINACEAE.

Commelina lanceolata R. Br. Between Liparinga and Noonkanbah, Apr., 1927.

CONVOLVULACEAE.

<i>Ipomoea angustifolia</i> Jacq.	Derby, N.W.A., Apr., 1927.
<i>I. heterophylla</i> R. Br. (seeds not glabrous)	Derby, N.W.A., Apr., 1927.
<i>I. dissecta</i> Willd.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>I. eriocarpa</i> R. Br.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Evolvulus alsinoides</i> Linn.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Cressa cretica</i> Linn.	Derby, N.W.A., Apr., 1927.

CUCURBITACEAE.

<i>Cucumis trigonus</i> Roxb.	Fitzroy Rd., 12 m. from Yeeda, and near Oscar Range, Rd. to Leopold, N.W.A., Apr., 1927.
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CYPERACEAE.

<i>Fimbristylis solidifolia</i> F.v.M.	Shore Rd. to Leopold, 10 m. from Derby, N.W.A., Apr., 1927.
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DROSERACEAE.

<i>Byblis liniflora</i> Salisb.	Shore Rd. to Leopold, Derby, N.W.A., Apr., 1927.
<i>Drosera indica</i> Linn.	Shore Rd. to Leopold, 10 m. from Derby, N.W.A., Apr., 1927.

EUPHORBIACEAE.

<i>Euphorbia chrysocarpha</i> W.V.F.	Derby, N.W.A., Apr., 1927.
<i>Sebastiania chamelaea</i> F.v.M.	Yeeda, 28 m. S.E. of Derby, N.W.A., Apr., 1927.
<i>Phyllanthus maderaspatanus</i> Linn.	4 m. N.E. of Derby, N.W.A., Apr., 1927.

GOODENIACEAE.

<i>Goodenia lamprosperma</i> F.v.M.	Liparinga, Fitzroy R., N.W.A., Apr., 1927.
<i>G. sepulcosa</i> F.v.M.	6 m. E. of Derby, Apr., 1927.
<i>Velleia panduriformis</i> A. Cunn.	Yeeda, 28 m. S.E. of Derby, N.W.A., Apr., 1927.

GRAMINEAE.

<i>Eriachne ovata</i> Nees.	Derby, N.W.A., Apr., 1927.
<i>Eragrostis tenella</i> Beauv.	3 m. S. of Gogo stn., Fitzroy, N.W.A., Apr., 1927.

<i>Ischaemum laxum</i> R. Br.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Andropogon australis</i> Spreng.	Derby, N.W.A., Apr., 1927.
<i>A. bombycinus</i> R. Br.	Between Liparinga and Noonkanbah, N.W.A., Apr., 1927.
<i>Leptochloa polystachya</i> Benth.	3 m. S. of Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Pennisetum cenchroides</i> Rich.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Chionachne cyathopoda</i> F.v.M.	Fitzroy crossing, N.W.A., May, 1927.
<i>Pappophorum nigricans</i> R. Br.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Panicum airoides</i> R. Br.	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>P. colonum</i> Link. (<i>Echinochloa</i>)	3 m. S. of Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>P. distachyum</i> Linn. (<i>Brachiaria</i>)	Gogo stn., Fitzroy R., N.W.A., May, 1927.
<i>Themeda membranacea</i> Lindl. (<i>Anthistiria</i>)	Gogo stn., Fitzroy R., N.W.A., May, 1927.

LEGUMINOSAE.

<i>Sesbania aculeata</i> Pers.	Shore Rd. to Leopold, 10 m. from Derby, N.W.A., Apr., 1927.
<i>Indigoferaenneaphylla</i> Linn.	Derby, N.W.A., Apr., 1927.
<i>I. hirsuta</i> Linn.	Derby, N.W.A., Apr., 1927.
<i>I. linophylla</i> Retz.	Derby, N.W.A., Apr., 1927.
<i>I. viscosa</i> Lam.	Derby, N.W.A., Apr., 1927.
<i>Æschynomene indica</i> Linn.	Shore Rd. to Leopold, 10 m. from Derby, N.W.A., Apr., 1927; also Liparinga, Fitzroy Rd.
<i>Zornia diphylla</i> Pers.	6 m. E. of Derby, N.W.A., Apr., 1927.
<i>Neptunia monosperma</i> F.v.M.	Liparinga, N.W.A., Apr., 1927.
<i>Vigna lanceolata</i> Benth.	Liparinga, Fitzroy R., Billabong Flat, N.W.A., Apr., 1927.
<i>Crotalaria crispata</i> F.v.M.	Mt. Anderson, Fitzroy Rd., N.W.A., Apr., 1927.
<i>C. trifoliastrum</i> Willd.	4 m. N.E. of Derby, N.W.A., Apr., 1927.
<i>Glycine tomentosa</i> Benth.	4 m. N.E. of Derby, N.W.A., Apr., 1927.

LOGANIACEAE.

Mitrasacme exserta F.v.M. 6 m. E. of Derby, N.W.A., Apr., 1927; also Fitzroy R., 28 m. from Yeeda, Apr., 1927.
M. prolifera R. Br. 6 m. E. of Derby, N.W.A., Apr., 1927.

LORANTHACEAE.

Loranthus Exocarpi Behr. On *Hakea*, 6 m. E. of Derby, N.W.A., Apr., 1927.

LYTHRACEAE.

Ammannia multiflora Roxb. 3 m. S. of Gogo stn., Fitzroy R., May, 1927.

MALVACEAE.

Cienfuegoscia latifolia Benth. 4 m. N.E. of Derby, Apr., 1927.
Abutilon Andrewesianum W.V.F. 10 m. E. of Derby, N.W.A., Apr., 1927.
A. Cunninghamii Benth. Derby, N.W.A., Apr., 1927.
Sida virgata Hook. Derby, N.W.A., Apr., 1927.
Hibiscus cannabinus Linn. Fitzroy Rd., 12 m. from Yeeda, N.W.A., Apr., 1927.
H. panduraeformis Burm. 8 m. from Yeeda on Fitzroy R., N.W.A., Apr., 1927.

MYRTACEAE.

Eucalyptus perfoliata R. Br. Gogo stn., Fitzroy R., N.W.A., May, 1927.
E. terminalis F.v.M. Shore Rd. to Leopold, 10 m. from Derby, N.W.A., Apr., 1927.
Melaleuca alsophila A. Cunn. Shore Rd. to Leopold, 10 m. from Derby, N.W.A., April, 1927.
M. Leucadendron Linn. var. *coriacea* Rd. to Leopold, Derby, N.W.A., and between Jubilee stn. and Fitzroy Crossing, Apr., 1927.
M. Leucadendron, Linn. var. *Crosslandiana* Between Jubilee stn. and Fitzroy Crossing, N.W.A., Apr., 1927.

NYCTAGINACEAE.

Boerhaavia diffusa Linn. 6 m. E. of Derby, N.W.A., Apr., 1927.

ONAGRACEAE.

Ludwigia parviflora Roxb. 3 m. S. of Gogo stn., Fitzroy R., N.W.A., May, 1927.

POLYGALACEAE.

Polygala chinensis Linn. Yeeda, 28 m. S.E. of Derby,
(*P. Tepperi* F.v.M.) N.W.A., Apr., 1927.

PORTULACACEAE.

Calandrinia strophiolata F.v.M. Shore Rd. to Leopold, 10 m.
from Derby, N.W.A., Apr., 1927.

Portulaca tuberosa Roxb. Shore Rd. to Leopold, 10 m.
from Derby, N.W.A., Apr., 1927.

PROTEACEAE.

Grevillea agrifolia A. Cunn. Yeeda, 28 m. S.E. of Derby,
N.W.A., Apr., 1927.

RUBIACEAE.

Oldenlandia scleranthoides Benth. and Hook. Shore Rd. to Leopold, Derby,
N.W.A., Apr., 1927.

Spermacoce auriculata F.v.M. Shore Rd. to Leopold, 10 m.
from Derby, N.W.A., Apr., 1927.

SANTALACEAE.

Santalum lanceolatum R. Br. Jubilee stn., 26 m. W. of Fitzroy
Crossing, N.W.A., Apr., 1927.

SAPINDACEAE.

Distichostemon phyllopterus F.v.M. 4 m. N.E. of Derby, N.W.A.,
Apr., 1927.

SCROPHULARIACEAE.

Morgania glabra R. Br. Between Noonkanbah and Liparinga,
N.W.A., Apr., 1927.

M. parviflora Benth. 4 m. N.E. of Derby, N.W.A.,
Apr., 1927.

Buchnera urticifolia R. Br. Shore Rd. to Leopold, 10 m.
from Derby, N.W.A., Apr., 1927.

Mimulus gracilis R. Br. Shore Rd. to Leopold, 10 m.
from Derby, N.W.A., Apr., 1927.

Striga multiflora Benth. Gogo stn., Fitzroy R., N.W.A.,
May, 1927.

Linnophila hirsuta Benth. Mt. Anderson, Fitzroy Rd.,
N.W.A., Apr., 1927.

TILIACEAE.

Triumfetta plumigera F.v.M. 4 m. N.E. of Derby, N.W.A.,
Apr., 1927.

STERCULIACEAE.

Waltheria indica Linn. Shore Rd. to Leopold from
Derby, N.W.A., Apr., 1927.

STYLIIDIACEAE.

Styliodium leptorrhizum F.v.M. 6 m. E. of Derby, N.W.A., Apr.,
var. *pilosum* Benth. 1927.

VIOLACEAE.

Hybanthus aurantiacus F.v.M. Gogo stn., Fitzroy R., N.W.A.,
May, 1927.

H. cuneaspermus F.v.M. Gogo stn., Fitzroy R., N.W.A.,
May, 1927.

XYRIDACEAE.

Xyris complanata R.Br. Shore Rd. to Leopold, 10 m. from
Derby, N.W.A., Apr., 1927.

Explanation of Plate V.

Eucalyptus Gilleni Ewart and Kerr, 1926.

From plant grown in System Garden, University of Melbourne,
from seed collected in 1924, on Mt. Gillen, Central Australia.